SCORE Search Results Details for Application 10571302 and Search Result 20081124, 104456, us-10-571-302-1 rag.

 Score Home
 Retrieve Application
 SCORE System
 SCORE
 Comments /

 Page
 List
 Overview
 FAQ
 Suggestions

This page gives you Search Results detail for the Application 10571302 and Search Result 20081124_104456_us-10-571-302-1.rag.

Go Back to previous page

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OM protein - protein search, using sw model

Run on: November 24, 2008, 10:45:07; Search time 77 Seconds

(without alignments)

390.092 Million cell updates/sec

Title: US-10-571-302-1

Perfect score: 246

Sequence: 1 EDCIPKWKGCVNRHGDCCEGLECWKRRRSFEVCVPKTPKT 40

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 4151667 seqs, 751288301 residues

Total number of hits satisfying chosen parameters: 4151667

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database: A_Geneseq_200808:*

1: qeneseqp1980s:*

2: genesegp1990s:*

3: geneseqp2000:*

4: genesegp2001:*

4: genesedbzuur:

5: geneseqp2002:*

6: geneseqp2003a:*

7: geneseqp2003b:*

8: geneseqp2004a:*

9: geneseqp2004b:*
10: geneseqp2005:*
11: geneseqp2006:*
12: geneseqp2007:*
13: geneseqp2008:*

양

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result		∘ Query					
No.	Score	_	Length	DB	ID	Description	
1	 246	100.0	40	 5	 AAU09425	Aau09425 Psalmopoe	
2	246	100.0	40	10	ADY80805	Ady80805 Psalmotox	
3	246	100.0	40	11	AEG95747	Aeg95747 Psalmotox	
4	246	100.0	40	12	AFH53530	Afh53530 Tarantula	
5	246	100.0	40	13	ARW11374	Arw11374 P. cambri	
6	246	100.0	41	10	ADY80806	Ady80806 Psalmotox	
7	235	95.5	38	11	AEG95748	Aeg95748 Psalmotox	
8	235	95.5	38	12	AFH53531	Afh53531 Tarantula	
9	235	95.5	38	13	ARW11375	Arw11375 P. cambri	
10	229	93.1	37	11	AEG95749	Aeg95749 Psalmotox	
11	229	93.1	37	12	AFH53532	Afh53532 Tarantula	
12	229	93.1	37	13	ARW11376	Arw11376 P. cambri	
13	208	84.6	33	11	AEG95750	Aeg95750 Psalmotox	
14	208	84.6	33	12	AFH53533	Afh53533 Tarantula	
15	208	84.6	33	13	ARW11377	Arw11377 P. cambri	
16	197	80.1	31	11	AEG95751	Aeg95751 Psalmotox	
17	197	80.1	31	12	AFH53534	Afh53534 Tarantula	
18	197	80.1	31	13	ARW11378	Arw11378 P. cambri	
19	67.5	27.4	54	10	AEA30177	Aea30177 Pertussis	
20	67.5	27.4	58	10	AEA30251	Aea30251 Pertussis	
21	67.5	27.4	62	10	AEA30306	Aea30306 Pertussis	
22	66	26.8	54	10	AEA30264	Aea30264 Pertussis	
23	66	26.8	62	10	AEA30305	Aea30305 Pertussis	
24	65	26.4	35	5	AA015120	Aao15120 Agriospho	
25	65	26.4	54	10	AEA30174	Aea30174 Pertussis	
26	65	26.4	60	10	AEA30248	Aea30248 Pertussis	
27	65	26.4	62	10	AEA30293	Aea30293 Pertussis	
28	64	26.0	35	10	AEA30163	Aea30163 Wild-type	
29	64	26.0	36	5	AA015121	Aao15121 Isyndus o	
30	63	25.6	36	13	AOG35820	Aog35820 Antimicro	
31	63	25.6	62	10	AEA30314	Aea30314 Pertussis	
32	62.5	25.4	156	6	ADN40046	Adn40046 Cancer/an	
33	62	25.2	51	10	AEA30303	Aea30303 Pertussis	
34	62	25.2	54	10	AEA30175	Aea30175 Pertussis	

35	62	25.2	60	10	AEA30249	Aea30249 Pertussis
36	62	25.2	62	10	AEA30297	Aea30297 Pertussis
37	61	24.8	34	10	AEA30222	Aea30222 Pertussis
38	61	24.8	34	10	AEA30160	Aea30160 Pertussis
39	61	24.8	54	10	AEA30285	Aea30285 Pertussis
40	61	24.8	54	10	AEA30190	Aea30190 Pertussis
41	60.5	24.6	31	2	AAR53578	Aar53578 Spider ve
42	60.5	24.6	31	2	AAR53574	Aar53574 Spider ve
43	60.5	24.6	31	2	AAR63752	Aar63752 Outward K
44	60.5	24.6	82	4	AAU06025	Aau06025 Cone snai
45	60.5	24.6	127	10	AEN25742	Aen25742 Solanum c

ALIGNMENTS

```
RESULT 1
AAU09425
     AAU09425 standard; peptide; 40 AA.
ID
XX
AC
     AAU09425;
XX
DT
     15-JUN-2007 (revised)
DT
     07-AUG-2003 (revised)
DT
     12-MAR-2002
                  (first entry)
XX
     Psalmopoeus cambridgei psalmotoxin 1 (PcTX1) polypeptide.
\mathsf{DE}
XX
     Acid sensitive ion channel la blocker; ASICla channel blocker; PcTX1;
ΚW
     Psalmotoxin 1; South-American tarantula; proton-gated sodium channel;
KW
     venom.
KW
XX
     Unidentified.
OS
XX
     WO200185931-A2.
PΝ
XX
PD
     15-NOV-2001.
XX
PF
     10-MAY-2001; 2001WO-IB000934.
XX
     10-MAY-2000; 2000US-0203309P.
PR
     10-MAY-2001; 2001US-00852378.
PR
XX
PA
     (CNRS ) CNRS CENT NAT RECH SCI.
XX
     Lazdunski M, Escoubas P, De Weille J, Diochot S;
PΙ
XX
DR
     WPI; 2002-066602/09.
     PC:NCBI; gi39654139.
DR
```

```
XX
PΤ
    Novel polypeptide functioning as acid sensitive ion channel 1a blocker,
    termed Psalmotoxin 1, isolated from venom of South-American tarantula
PΤ
    Psalmopoeus carnbridgei.
PT
XX
    Claim 6; Fig 1D; 32pp; English.
PS
XX
    The present invention relates to a pure polypeptide functioning as an
CC
CC
     acid sensitive ion channel (ASIC) 1a blocker, called Psalmotoxin 1
     (PcTX1). The PcTX1 polypeptide is identified from the venom of the South-
CC
    American tarantula Psalmopoeus cambridgei. The polypeptide of the
CC
     invention is useful for inhibiting the proton-gated sodium channel,
CC
    ASIC1a. A nucleic acid encoding the PcTX1 polypeptide is useful to
CC
    transform animals and establish a line of transgenic animals, and as
CC
    probes for hybridisation detection of similar polypeptides functioning as
CC
    an ASIC1a channel blocker in other individuals or species and for PCR
CC
CC
    experiments, for example to search for genes in other species or with a
CC
    diagnostic aim. A PcTX1 antibody is useful in the search for new
CC
    polypeptides functioning as an ASIC1a channel blocker or its homologue in
CC
    other species. The present sequence represents the C. cambridgei
CC
    Psalmotoxin 1 (PcTX1) polypeptide of the invention. (Updated on 07-AUG-
CC
     2003 to correct OS field.)
CC
CC
    Revised record issued on 15-JUN-2007: Enhanced with precomputed
     information from BOND.
CC
XX
    Sequence 40 AA;
SQ
 Query Match
                         100.0%; Score 246; DB 5; Length 40;
                         100.0%; Pred. No. 8.9e-22;
 Best Local Similarity
           40; Conservative 0; Mismatches 0; Indels
 Matches
                                                                0; Gaps
                                                                            0;
           1 EDCIPKWKGCVNRHGDCCEGLECWKRRRSFEVCVPKTPKT 40
Qу
             Db
           1 EDCIPKWKGCVNRHGDCCEGLECWKRRRSFEVCVPKTPKT 40
RESULT 2
ADY80805
    ADY80805 standard; protein; 40 AA.
ID
XX
AC
    ADY80805;
XX
DT
    15-JUN-2007 (revised)
    02-JUN-2005
                 (first entry)
DT
XX
DE
    Psalmotoxin 1 (PcTX1) SEQ ID NO 1.
XX
    cytostatic; gene therapy; pharmaceutical; cellular transport; glioma;
KW
```

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SCORE\ Search\ Results\ Details\ for\ Application\ 10571302\ and\ Search\ Result\ 20081124\_104456\_us-10-571-302-1.rag.
     breast tumor; endocrine disease; gynecology and obstetrics; melanoma;
ΚW
     cancer; neoplasm; Psalmotoxin 1; PcTX1; BOND PC; G08200; G09405; G019871.
KW
XX
     Psalmopoeus cambridgei.
OS
XX
     WO2005025518-A2.
PN
XX
PD
     24-MAR-2005.
XX
     13-SEP-2004; 2004WO-US029970.
PF
XX
     11-SEP-2003; 2003US-0502034P.
PR
XX
     (UABR-) UAB RES FOUND.
PA
XX
PΙ
     Benos DJ, Bubien JK, Gillespie GY;
XX
     WPI; 2005-233410/24.
DR
     PC:NCBI; qi44888346.
DR
```

Treatment of tumor in subject, where tumor has expression of sodium channel mediating constitutive inward sodium current, involves administering composition comprising PcTX1 or variant of PcTX1 linked to cytotoxic agent.

Claim 46; SEQ ID NO 1; 63pp; English.

The invention describes a method of treating a tumor in a subject in need of the treatment, where the tumor has an expression of a sodium channel mediating a constitutive inward sodium current. The method involves administering an amount of a pharmaceutical composition comprising PcTX1 (Psalmotoxin 1) or a variant of PcTX1 linked to a cytotoxic agent. Also described are: diagnosis to identify individuals with tumors having a constitutive inward Na + current; identifying agents that bind to a Na + channel mediating a constitutive inward Na + current; identifying agents that modulate a constitutive inward Na + current; and visualizing a tumor in a subject in need of such visualization, where the tumor has an expression of a Na + channel mediating a constitutive inward Na + current. The method is useful for treating a tumor in a subject, where the tumor has an expression of a Na + channel mediating a constitutive inward Na + current. It is preferably useful for treating glioma, breast carcinoma, or melanoma. This is the amino acid sequence of Psalmotoxin 1 (PcTX1) from the venom of the south american tarantula.

Revised record issued on 15-JUN-2007: Enhanced with precomputed information from BOND.

SQ Sequence 40 AA;

XX

PΤ PΤ

PT

PT

XX

PS XX CC

CC

CC CC

CC

CC

CC

CC

CC

CC

CC

CC CC

CC

CC

CC

CC CC

CC

XX

```
Query Match
                         100.0%; Score 246; DB 10; Length 40;
  Best Local Similarity
                         100.0%; Pred. No. 8.9e-22;
           40; Conservative 0; Mismatches
 Matches
                                                  0;
                                                      Indels
                                                               0; Gaps
                                                                           0;
           1 EDCIPKWKGCVNRHGDCCEGLECWKRRRSFEVCVPKTPKT 40
Qу
             Db
           1 EDCIPKWKGCVNRHGDCCEGLECWKRRRSFEVCVPKTPKT 40
RESULT 3
AEG95747
ID
    AEG95747 standard; peptide; 40 AA.
XX
АC
    AEG95747;
XX
DT
    15-JUN-2007 (revised)
    01-JUN-2006 (first entry)
DT
XX
DE
    Psalmotoxin 1 (PcTx1).
XX
    Acid sensing ion channel la inhibitor; psalmotoxin 1; PcTx1; ischemia;
KW
KW
    vasotropic; cardiovascular disease; drug screening; BOND_PC; GO8200;
KW
    G09405; G019871.
XX
OS
    Psalmopoeus cambridgei.
XX
    WO2006034035-A2.
PN
XX
PD
    30-MAR-2006.
XX
PF
    16-SEP-2005; 2005WO-US033171.
XX
    16-SEP-2004; 2004US-0611241P.
PR
XX
     (VIRO-) VIROGENOMICS INC.
PΑ
XX
PΙ
    Simon RP, Xiong Z;
XX
DR
    WPI; 2006-254090/26.
    PC:NCBI; gi44888346.
DR
XX
    Treating ischemia comprises administering a therapeutically effective
PT
    amount of acid sensing ion channel la inhibitor to an ischemic subject to
PΤ
PT
    reduce injury resulting from ischemia.
XX
    Claim 7; SEQ ID NO 1; 55pp; English.
ΡS
XX
CC
    The invention describes the treatment of ischemia which comprises
CC
     administering a therapeutically effective amount of an acid sensing ion
```

```
channel la (ASICla) inhibitor to an ischemic subject to reduce injury
CC
    resulting from ischemia. Also included are: a method of identifying drugs
CC
     for treating ischemia, comprising obtaining ASIC1a inhibitor(s), and
CC
CC
     testing the ASIC1a inhibitor(s) for effect on an ischemic subject; a
CC
     composition for treatment of ischemia, comprising an ASIC1a inhibitor
    disposed in a vehicle at a concentration that provides a therapeutically
CC
CC
    effective amount of the ASlC1a inhibitor for treatment of ischemia when
CC
     administered to an ischemic subject; a method of manufacturing a
CC
    medicament for treatment of ischemia, comprising obtaining an ASIC1a
     inhibitor, and combining the ASICla inhibitor with a vehicle to produce a
CC
    medicament having an inhibitor for administration to an ischemic subject
CC
     for treatment of ischemia; and the use of an ASIC1a inhibitor for the
CC
    manufacture of a medicament to treat ischemia. The step of administering
CC
CC
     includes a step of administering an ASICla inhibitor that inhibits ASICla
     selectively relative to other ASIC family member(s) and includes a step
CC
    of administering a peptide that includes a cystine knot. It includes a
CC
CC
     step of administering a peptide that is identical to or a derivative of
CC
    PcTx1 (SEQ ID NO:1; see AEG95747). The peptide is a derivative that
CC
    differs from PcTx1 by at least one deletion, substitution, and/or
    addition of amino acid(s). A second inhibitor is administered to the
CC
    subject, and configured to inhibit at least one other channel that is not
CC
CC
     a member of the acid sensing ion channel family. The step of screening
CC
     includes a step of detecting calcium (Ca 2+ ) flux into the cultured
CC
    cells. The step of detecting Ca 2+ flux is performed
    electrophysiologically, with a Ca 2+ sensitive dye, and/or with dye that
CC
     is sensitive to membrane potential. The present sequence represents full-
CC
CC
     length psalmotoxin 1 (PcTx1).
CC
CC
    Revised record issued on 15-JUN-2007: Enhanced with precomputed
CC
     information from BOND.
XX
SQ
     Sequence 40 AA;
                         100.0%; Score 246; DB 11; Length 40;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 8.9e-22;
 Matches 40; Conservative 0; Mismatches 0;
                                                      Indels
                                                                0;
                                                                    Gaps
                                                                            0;
           1 EDCIPKWKGCVNRHGDCCEGLECWKRRRSFEVCVPKTPKT 40
Qу
              1 EDCIPKWKGCVNRHGDCCEGLECWKRRRSFEVCVPKTPKT 40
Db
RESULT 4
AFH53530
    AFH53530 standard; protein; 40 AA.
ID
XX
AC
    AFH53530;
XX
DT
    26-JUL-2007 (first entry)
```

```
XX
DE
     Tarantula psalmotoxin 1 PcTx.
XX
     therapeutic; prophylaxis; neuron; nervous system injury; ischemia;
KW
     hypoxia; neuroprotective; vasotropic; psalmotoxin 1; PcTx;
KW
     Alzheimers disease; hypertension; epilepsy; brain injury;
KW
KW
     cerebrovascular ischemia; nootropic; hypotensive; cerebroprotective;
     anticonvulsant.
KW
XX
OS
     Psalmopoeus cambridgei.
XX
     WO2007030580-A2.
PN
XX
PD
     15-MAR-2007.
XX
PF
     08-SEP-2006; 2006WO-US034796.
XX
     09-SEP-2005; 2005US-0715881P.
PR
     19-MAY-2006; 2006US-0801830P.
PR
XX
PΑ
     (UYOR-) UNIV OREGON HEALTH SCI.
XX
PΙ
     Stenzel-Poore M, Stevens S, Simon R;
XX
DR
     WPI: 2007-458051/44.
XX
PΤ
     Protecting a cell in a subject against excitotoxic injury, ischemia or
     hypoxia by administering a composition comprising an agent that activates
PΤ
PT
     a Toll-like receptor and a composition comprising an acid sensing ion
     channel inhibitor.
PΤ
XX
PS
     Disclosure; SEQ ID NO 6; 42pp; English.
XX
     The invention describes a method of protecting a cell in a subject
CC
CC
     against excitotoxic injury, ischemia or hypoxia by administering a
CC
     composition comprising an agent that activates a Toll-like receptor,
CC
     preferably a CpG oligonucleotide, and a composition comprising an acid
CC
     sensing ion channel (ASIC) inhibitor, preferably Tarantula psalmotoxin 1
     (PcTx) or a related peptide. The invention also includes use of an ASIC
CC
     inhibitor in preparing a medicament for increasing the protective effect
CC
CC
     of preconditioning treatment with an agent that binds to and activates a
     Toll-like receptor. The ASIC inhibitor is useful in preparing a
CC
CC
     medicament for increasing the protective effect of preconditioning
     treatment with an agent that binds to and activates a Toll-like receptor,
CC
     where the preconditioning treatment protects against injury by an
CC
CC
     excitotoxic event, an ischemic event and/or a hypoxic event. This
CC
     sequence is Tarantula psalmotoxin 1 PcTx.
XX
```

Sequence 40 AA;

SQ

```
Query Match
                         100.0%; Score 246; DB 12;
                                                      Length 40;
 Best Local Similarity
                         100.0%; Pred. No. 8.9e-22;
           40; Conservative 0; Mismatches
                                                  0;
                                                      Indels
                                                               0; Gaps
                                                                            0;
           1 EDCIPKWKGCVNRHGDCCEGLECWKRRRSFEVCVPKTPKT 40
Qу
             Db
           1 EDCIPKWKGCVNRHGDCCEGLECWKRRRSFEVCVPKTPKT 40
RESULT 5
ARW11374
    ARW11374 standard; protein; 40 AA.
ID
XX
АC
    ARW11374;
XX
    24-JUL-2008 (first entry)
DT
XX
DE
    P. cambridgei psalmotoxin 1 (PcTx1) fragment SEQ ID NO:1.
XX
    therapeutic; brain injury; cerebrovascular ischemia; acidosis; vulnerary;
KW
KW
    cerebroprotective; vasotropic; metabolic-gen.; PcTx1; psalmotoxin; toxin;
KW
    BOND_PC; G08200; G09405; G019871.
XX
OS
    Psalmopoeus cambridgei.
XX
    WO2008063676-A2.
PN
XX
PD
    29-MAY-2008.
XX
PF
     21-NOV-2007; 2007WO-US024436.
XX
    21-NOV-2006; 2006US-0860522P.
PR
     20-NOV-2007; 2007US-00943546.
PR
XX
PA
     (NEUR-) NEUROPROTECT INC.
XX
PΙ
     Simon RP, Xiong Z;
XX
DR
    WPI; 2008-G68865/42.
    PC:NCBI; qi44888346.
DR
XX
PΤ
    Preventing or treating brain injury caused by stroke or seizure in
    subject, involves administering inhibitor of acid sensing ion channel and
PT
     secondary neuroprotective therapeutic agent.
PT
XX
PS
    Claim 10; SEQ ID NO 1; 120pp; English.
XX
CC
    The invention relates to a method of preventing or treating brain injury
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```
caused by stroke, seizure or epilepsy in a subject. This is done by
CC
    preventing acidosis by administering an inhibitor of acid sensing ion
CC
    channel and a secondary neuroprotective therapeutic agent. The secondary
CC
    neuroprotective therapeutic agent or any other adjunctive therapeutic
CC
CC
    agent that is an antagonist specific for a glutamate receptor,
    alkalinizing agent, anticoagulant, tissue plasminogen activator, asprin
CC
CC
    or an anti-platelet agent. The current sequence is that of a fragment of
CC
    the P. cambridgei derived psalmotoxin PcTx1.
CC
CC
    Revised record issued on 03-JUL-2008 : Enhanced with precomputed
CC
     information from BOND.
XX
SQ
    Sequence 40 AA;
 Query Match
                         100.0%; Score 246; DB 13; Length 40;
 Best Local Similarity 100.0%; Pred. No. 8.9e-22;
 Matches 40; Conservative 0; Mismatches 0;
                                                      Indels
                                                               0;
                                                                   Gaps
                                                                           0;
           1 EDCIPKWKGCVNRHGDCCEGLECWKRRRSFEVCVPKTPKT 40
Qу
             Db
           1 EDCIPKWKGCVNRHGDCCEGLECWKRRRSFEVCVPKTPKT 40
RESULT 6
ADY80806
ID
    ADY80806 standard; protein; 41 AA.
XX
    ADY80806;
АC
XX
    02-JUN-2005 (first entry)
DT
XX
    Psalmotoxin 1 (PcTX1) SEQ ID NO 2.
DE
XX
ΚW
    cytostatic; gene therapy; pharmaceutical; cellular transport; glioma;
    breast tumor; endocrine disease; gynecology and obstetrics; melanoma;
KW
    cancer; neoplasm; Psalmotoxin 1; PcTX1.
KW
XX
OS
    Psalmopoeus cambridgei.
XX
    WO2005025518-A2.
PΝ
XX
    24-MAR-2005.
PD
XX
PF
    13-SEP-2004; 2004WO-US029970.
XX
    11-SEP-2003; 2003US-0502034P.
PR
XX
PA
     (UABR-) UAB RES FOUND.
XX
```

```
PΙ
    Benos DJ, Bubien JK, Gillespie GY;
XX
DR
    WPI; 2005-233410/24.
XX
PΤ
    Treatment of tumor in subject, where tumor has expression of sodium
    channel mediating constitutive inward sodium current, involves
PT
PT
     administering composition comprising PcTX1 or variant of PcTX1 linked to
    cytotoxic agent.
PT
XX
PS
    Claim 46; SEQ ID NO 2; 63pp; English.
XX
CC
    The invention describes a method of treating a tumor in a subject in need
    of the treatment, where the tumor has an expression of a sodium channel
CC
CC
    mediating a constitutive inward sodium current. The method involves
     administering an amount of a pharmaceutical composition comprising PcTX1
CC
CC
     (Psalmotoxin 1) or a variant of PcTX1 linked to a cytotoxic agent. Also
CC
    described are: diagnosis to identify individuals with tumors having a
CC
    constitutive inward Na + current; identifying agents that bind to a Na +
CC
     channel mediating a constitutive inward Na + current; identifying agents
    that modulate a constitutive inward Na + current; and visualizing a tumor
CC
CC
     in a subject in need of such visualization, where the tumor has an
CC
    expression of a Na + channel mediating a constitutive inward Na +
CC
    current. The method is useful for treating a tumor in a subject, where
CC
    the tumor has an expression of a Na + channel mediating a constitutive
     inward Na + current. It is preferably useful for treating glioma, breast
CC
     carcinoma, or melanoma. This is the amino acid sequence of Psalmotoxin 1
CC
CC
     (PcTX1) from the venom of the south american tarantula.
XX
SQ
     Sequence 41 AA;
                         100.0%; Score 246; DB 10; Length 41;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 9.1e-22;
 Matches 40; Conservative 0; Mismatches 0;
                                                                0;
                                                      Indels
                                                                   Gaps
                                                                            0;
           1 EDCIPKWKGCVNRHGDCCEGLECWKRRRSFEVCVPKTPKT 40
Qу
             Db
           1 EDCIPKWKGCVNRHGDCCEGLECWKRRRSFEVCVPKTPKT 40
RESULT 7
AEG95748
ID
    AEG95748 standard; peptide; 38 AA.
XX
АC
    AEG95748;
XX
DT
    01-JUN-2006 (first entry)
XX
DE
    Psalmotoxin 1 (PcTx1), N-terminal deletion SEQ ID NO:2.
XX
```

```
Acid sensing ion channel la inhibitor; psalmotoxin 1; PcTx1; ischemia;
ΚW
     vasotropic; cardiovascular disease; drug screening.
KW
XX
OS
     Psalmopoeus cambridgei.
OS
     Synthetic.
XX
PN
     WO2006034035-A2.
XX
PD
     30-MAR-2006.
XX
PF
     16-SEP-2005; 2005WO-US033171.
```

PR 16-SEP-2004; 2004US-0611241P. XX

PA (VIRO-) VIROGENOMICS INC.

PI Simon RP, Xiong Z;

XX

XX

XX

XX PT

PΤ

PT XX PS

XX CC

CC

CC

CC CC

CC

CC

CC

CC

CC

CC

CC

CC

CC CC

CC

CC

CC

CC CC

CC

CC

CC

DR WPI; 2006-254090/26.

Treating ischemia comprises administering a therapeutically effective amount of acid sensing ion channel 1a inhibitor to an ischemic subject to reduce injury resulting from ischemia.

Example 2; SEQ ID NO 2; 55pp; English.

The invention describes the treatment of ischemia which comprises administering a therapeutically effective amount of an acid sensing ion channel 1a (ASIC1a) inhibitor to an ischemic subject to reduce injury resulting from ischemia. Also included are: a method of identifying drugs for treating ischemia, comprising obtaining ASICla inhibitor(s), and testing the ASIC1a inhibitor(s) for effect on an ischemic subject; a composition for treatment of ischemia, comprising an ASIC1a inhibitor disposed in a vehicle at a concentration that provides a therapeutically effective amount of the ASlC1a inhibitor for treatment of ischemia when administered to an ischemic subject; a method of manufacturing a medicament for treatment of ischemia, comprising obtaining an ASIC1a inhibitor, and combining the ASICla inhibitor with a vehicle to produce a medicament having an inhibitor for administration to an ischemic subject for treatment of ischemia; and the use of an ASIC1a inhibitor for the manufacture of a medicament to treat ischemia. The step of administering includes a step of administering an ASICla inhibitor that inhibits ASICla selectively relative to other ASIC family member(s) and includes a step of administering a peptide that includes a cystine knot. It includes a step of administering a peptide that is identical to or a derivative of PcTx1 (SEQ ID NO:1; see AEG95747). The peptide is a derivative that differs from PcTx1 by at least one deletion, substitution, and/or addition of amino acid(s). A second inhibitor is administered to the subject, and configured to inhibit at least one other channel that is not

```
a member of the acid sensing ion channel family. The step of screening
CC
     includes a step of detecting calcium (Ca 2+ ) flux into the cultured
CC
    cells. The step of detecting Ca 2+ flux is performed
CC
    electrophysiologically, with a Ca 2+ sensitive dye, and/or with dye that
CC
CC
     is sensitive to membrane potential. The present sequence represents full-
    length psalmotoxin 1 (PcTx1), N-terminal deletion SEQ ID NO:2.
CC
XX
SQ
    Sequence 38 AA;
 Query Match
                         95.5%; Score 235; DB 11; Length 38;
                        100.0%; Pred. No. 1.7e-20;
 Best Local Similarity
          38; Conservative 0; Mismatches 0; Indels
 Matches
                                                                0; Gaps
                                                                            0;
           3 CIPKWKGCVNRHGDCCEGLECWKRRRSFEVCVPKTPKT 40
Qу
              Db
           1 CIPKWKGCVNRHGDCCEGLECWKRRRSFEVCVPKTPKT 38
RESULT 8
AFH53531
ID
    AFH53531 standard; peptide; 38 AA.
XX
AC
    AFH53531;
XX
DT
    26-JUL-2007 (first entry)
XX
    Tarantula psalmotoxin 1 PcTx peptide SEQ ID NO:7.
\mathsf{DE}
XX
    therapeutic; prophylaxis; neuron; nervous system injury; ischemia;
ΚW
    hypoxia; neuroprotective; vasotropic; psalmotoxin 1; PcTx;
KW
    Alzheimers disease; hypertension; epilepsy; brain injury;
KW
    cerebrovascular ischemia; nootropic; hypotensive; cerebroprotective;
ΚW
     anticonvulsant.
KW
XX
OS
    Psalmopoeus cambridgei.
XX
PΝ
    WO2007030580-A2.
XX
PD
    15-MAR-2007.
XX
     08-SEP-2006; 2006WO-US034796.
PF
XX
     09-SEP-2005; 2005US-0715881P.
PR
     19-MAY-2006; 2006US-0801830P.
PR
XX
     (UYOR-) UNIV OREGON HEALTH SCI.
PA
XX
PΙ
    Stenzel-Poore M, Stevens S, Simon R;
XX
```

```
WPI; 2007-458051/44.
DR
XX
    Protecting a cell in a subject against excitotoxic injury, ischemia or
PΤ
    hypoxia by administering a composition comprising an agent that activates
PT
PΤ
     a Toll-like receptor and a composition comprising an acid sensing ion
     channel inhibitor.
PT
XX
ΡS
    Disclosure; SEQ ID NO 7; 42pp; English.
XX
    The invention describes a method of protecting a cell in a subject
CC
     against excitotoxic injury, ischemia or hypoxia by administering a
CC
CC
    composition comprising an agent that activates a Toll-like receptor,
    preferably a CpG oligonucleotide, and a composition comprising an acid
CC
     sensing ion channel (ASIC) inhibitor, preferably Tarantula psalmotoxin 1
CC
CC
     (PcTx) or a related peptide. The invention also includes use of an ASIC
CC
     inhibitor in preparing a medicament for increasing the protective effect
CC
    of preconditioning treatment with an agent that binds to and activates a
CC
     Toll-like receptor. The ASIC inhibitor is useful in preparing a
CC
    medicament for increasing the protective effect of preconditioning
CC
    treatment with an agent that binds to and activates a Toll-like receptor,
CC
    where the preconditioning treatment protects against injury by an
CC
    excitotoxic event, an ischemic event and/or a hypoxic event. This
CC
     sequence is a Tarantula psalmotoxin 1 PcTx-derived peptide.
XX
SO
    Sequence 38 AA;
 Query Match
                          95.5%; Score 235; DB 12; Length 38;
 Best Local Similarity
                         100.0%; Pred. No. 1.7e-20;
 Matches
           38; Conservative
                                0;
                                    Mismatches
                                                  0;
                                                      Indels
                                                                             0;
                                                                0;
                                                                    Gaps
            3 CIPKWKGCVNRHGDCCEGLECWKRRRSFEVCVPKTPKT 40
Qу
              Db
            1 CIPKWKGCVNRHGDCCEGLECWKRRRSFEVCVPKTPKT 38
RESULT 9
ARW11375
ID
    ARW11375 standard; peptide; 38 AA.
XX
AC
    ARW11375;
XX
    24-JUL-2008 (first entry)
DT
XX
\mathsf{DE}
    P. cambridgei psalmotoxin 1 (PcTx1) deletion variant SEQ ID NO:2.
XX
    therapeutic; brain injury; cerebrovascular ischemia; acidosis; vulnerary;
KW
    cerebroprotective; vasotropic; metabolic-gen.; PcTx1; psalmotoxin; toxin.
KW
XX
OS
    Psalmopoeus cambridgei.
```

```
XX
PN
    WO2008063676-A2.
XX
    29-MAY-2008.
PD
XX
PF
     21-NOV-2007; 2007WO-US024436.
XX
     21-NOV-2006; 2006US-0860522P.
PR
PR
     20-NOV-2007; 2007US-00943546.
XX
PA
     (NEUR-) NEUROPROTECT INC.
XX
PΙ
    Simon RP, Xiong Z;
XX
    WPI; 2008-G68865/42.
DR
XX
PΤ
    Preventing or treating brain injury caused by stroke or seizure in
     subject, involves administering inhibitor of acid sensing ion channel and
PΤ
PΤ
     secondary neuroprotective therapeutic agent.
XX
PS
    Claim 11; SEQ ID NO 2; 120pp; English.
XX
CC
    The invention relates to a method of preventing or treating brain injury
CC
    caused by stroke, seizure or epilepsy in a subject. This is done by
    preventing acidosis by administering an inhibitor of acid sensing ion
CC
    channel and a secondary neuroprotective therapeutic agent. The secondary
CC
CC
    neuroprotective therapeutic agent or any other adjunctive therapeutic
CC
    agent that is an antagonist specific for a glutamate receptor,
CC
    alkalinizing agent, anticoagulant, tissue plasminogen activator, asprin
    or an anti-platelet agent. The current sequence is that of a deletion
CC
CC
    variant of the P. cambridgei derived psalmotoxin PcTx1 with a 70 amino
CC
    acid N-terminal deletion.
XX
SO
    Sequence 38 AA;
 Query Match
                         95.5%; Score 235; DB 13; Length 38;
 Best Local Similarity
                         100.0%; Pred. No. 1.7e-20;
           38; Conservative
                              0; Mismatches
 Matches
                                                  0; Indels
                                                                0;
                                                                    Gaps
                                                                            0;
Qу
           3 CIPKWKGCVNRHGDCCEGLECWKRRRSFEVCVPKTPKT 40
             1 CIPKWKGCVNRHGDCCEGLECWKRRRSFEVCVPKTPKT 38
Db
RESULT 10
AEG95749
    AEG95749 standard; peptide; 37 AA.
ID
XX
АC
    AEG95749;
```

```
XX
DT
     01-JUN-2006
                  (first entry)
XX
     Psalmotoxin 1 (PcTx1), C-terminal deletion SEQ ID NO:3.
DE
XX
     Acid sensing ion channel la inhibitor; psalmotoxin 1; PcTx1; ischemia;
KW
KW
     vasotropic; cardiovascular disease; drug screening.
XX
OS
     Psalmopoeus cambridgei.
OS
     Synthetic.
XX
     WO2006034035-A2.
PN
XX
PD
     30-MAR-2006.
XX
PF
     16-SEP-2005; 2005WO-US033171.
XX
     16-SEP-2004; 2004US-0611241P.
PR
XX
PA
     (VIRO-) VIROGENOMICS INC.
XX
PΙ
     Simon RP, Xiong Z;
XX
     WPI; 2006-254090/26.
DR
XX
     Treating ischemia comprises administering a therapeutically effective
PT
```

Treating ischemia comprises administering a therapeutically effective amount of acid sensing ion channel la inhibitor to an ischemic subject to reduce injury resulting from ischemia.

Example 2; SEQ ID NO 3; 55pp; English.

PT

PT XX PS

XX CC

CC

CC CC

CC

CC

CC

CC

CC CC

CC

CC

CC

CC CC

CC

CC

CC

The invention describes the treatment of ischemia which comprises administering a therapeutically effective amount of an acid sensing ion channel la (ASICla) inhibitor to an ischemic subject to reduce injury resulting from ischemia. Also included are: a method of identifying drugs for treating ischemia, comprising obtaining ASICla inhibitor(s), and testing the ASIC1a inhibitor(s) for effect on an ischemic subject; a composition for treatment of ischemia, comprising an ASIC1a inhibitor disposed in a vehicle at a concentration that provides a therapeutically effective amount of the ASlC1a inhibitor for treatment of ischemia when administered to an ischemic subject; a method of manufacturing a medicament for treatment of ischemia, comprising obtaining an ASIC1a inhibitor, and combining the ASICla inhibitor with a vehicle to produce a medicament having an inhibitor for administration to an ischemic subject for treatment of ischemia; and the use of an ASIC1a inhibitor for the manufacture of a medicament to treat ischemia. The step of administering includes a step of administering an ASICla inhibitor that inhibits ASICla selectively relative to other ASIC family member(s) and includes a step of administering a peptide that includes a cystine knot. It includes a

```
step of administering a peptide that is identical to or a derivative of
CC
    PcTx1 (SEQ ID NO:1; see AEG95747). The peptide is a derivative that
CC
    differs from PcTx1 by at least one deletion, substitution, and/or
CC
     addition of amino acid(s). A second inhibitor is administered to the
CC
CC
     subject, and configured to inhibit at least one other channel that is not
     a member of the acid sensing ion channel family. The step of screening
CC
CC
     includes a step of detecting calcium (Ca 2+ ) flux into the cultured
CC
    cells. The step of detecting Ca 2+ flux is performed
CC
     electrophysiologically, with a Ca 2+ sensitive dye, and/or with dye that
     is sensitive to membrane potential. The present sequence represents full-
CC
CC
     length psalmotoxin 1 (PcTx1), C-terminal deletion SEQ ID NO:3.
XX
SQ
    Sequence 37 AA;
 Query Match
                         93.1%; Score 229; DB 11; Length 37;
 Best Local Similarity 100.0%; Pred. No. 8.8e-20;
 Matches 37; Conservative 0; Mismatches 0; Indels
                                                               0;
                                                                   Gaps
                                                                            0;
           1 EDCIPKWKGCVNRHGDCCEGLECWKRRRSFEVCVPKT 37
Qу
             1 EDCIPKWKGCVNRHGDCCEGLECWKRRRSFEVCVPKT 37
Db
RESULT 11
AFH53532
ID
    AFH53532 standard; peptide; 37 AA.
XX
    AFH53532;
АC
XX
    26-JUL-2007 (first entry)
DT
XX
    Tarantula psalmotoxin 1 PcTx peptide SEQ ID NO:8.
DE
XX
KW
    therapeutic; prophylaxis; neuron; nervous system injury; ischemia;
    hypoxia; neuroprotective; vasotropic; psalmotoxin 1; PcTx;
KW
    Alzheimers disease; hypertension; epilepsy; brain injury;
KW
    cerebrovascular ischemia; nootropic; hypotensive; cerebroprotective;
KW
     anticonvulsant.
KW
XX
OS
    Psalmopoeus cambridgei.
XX
PN
    WO2007030580-A2.
XX
PD
    15-MAR-2007.
XX
    08-SEP-2006; 2006WO-US034796.
PF
XX
PR
    09-SEP-2005; 2005US-0715881P.
     19-MAY-2006; 2006US-0801830P.
PR
```

```
XX
PΑ
     (UYOR-) UNIV OREGON HEALTH SCI.
XX
PΙ
    Stenzel-Poore M, Stevens S, Simon R;
XX
    WPI; 2007-458051/44.
DR
XX
    Protecting a cell in a subject against excitotoxic injury, ischemia or
PT
PΤ
    hypoxia by administering a composition comprising an agent that activates
     a Toll-like receptor and a composition comprising an acid sensing ion
PT
PT
     channel inhibitor.
XX
PS
    Disclosure; SEQ ID NO 8; 42pp; English.
XX
    The invention describes a method of protecting a cell in a subject
CC
     against excitotoxic injury, ischemia or hypoxia by administering a
CC
CC
    composition comprising an agent that activates a Toll-like receptor,
CC
    preferably a CpG oligonucleotide, and a composition comprising an acid
CC
     sensing ion channel (ASIC) inhibitor, preferably Tarantula psalmotoxin 1
     (PcTx) or a related peptide. The invention also includes use of an ASIC
CC
CC
     inhibitor in preparing a medicament for increasing the protective effect
CC
    of preconditioning treatment with an agent that binds to and activates a
CC
    Toll-like receptor. The ASIC inhibitor is useful in preparing a
CC
    medicament for increasing the protective effect of preconditioning
    treatment with an agent that binds to and activates a Toll-like receptor,
CC
    where the preconditioning treatment protects against injury by an
CC
CC
    excitotoxic event, an ischemic event and/or a hypoxic event. This
CC
     sequence is a Tarantula psalmotoxin 1 PcTx-derived peptide.
XX
     Sequence 37 AA;
SQ
 Query Match
                         93.1%; Score 229; DB 12; Length 37;
 Best Local Similarity 100.0%; Pred. No. 8.8e-20;
 Matches 37; Conservative 0; Mismatches
                                               0; Indels
                                                                0;
                                                                   Gaps
                                                                            0;
           1 EDCIPKWKGCVNRHGDCCEGLECWKRRRSFEVCVPKT 37
Qу
              Db
           1 EDCIPKWKGCVNRHGDCCEGLECWKRRRSFEVCVPKT 37
RESULT 12
ARW11376
    ARW11376 standard; peptide; 37 AA.
ID
XX
АC
    ARW11376;
XX
DT
    24-JUL-2008 (first entry)
XX
    P. cambridgei psalmotoxin 1 (PcTx1) deletion variant SEQ ID NO:3.
DE
```

```
XX
     therapeutic; brain injury; cerebrovascular ischemia; acidosis; vulnerary;
KW
    cerebroprotective; vasotropic; metabolic-gen.; PcTx1; psalmotoxin; toxin.
KW
XX
    Psalmopoeus cambridgei.
OS
XX
PN
    WO2008063676-A2.
XX
PD
    29-MAY-2008.
XX
PF
     21-NOV-2007; 2007WO-US024436.
XX
PR
     21-NOV-2006; 2006US-0860522P.
     20-NOV-2007; 2007US-00943546.
PR
XX
PA
     (NEUR-) NEUROPROTECT INC.
XX
PΙ
    Simon RP, Xiong Z;
XX
DR
    WPI; 2008-G68865/42.
XX
PΤ
    Preventing or treating brain injury caused by stroke or seizure in
PΤ
     subject, involves administering inhibitor of acid sensing ion channel and
PΤ
     secondary neuroprotective therapeutic agent.
XX
    Claim 12; SEQ ID NO 3; 120pp; English.
PS
XX
CC
    The invention relates to a method of preventing or treating brain injury
CC
    caused by stroke, seizure or epilepsy in a subject. This is done by
    preventing acidosis by administering an inhibitor of acid sensing ion
CC
CC
    channel and a secondary neuroprotective therapeutic agent. The secondary
CC
    neuroprotective therapeutic agent or any other adjunctive therapeutic
     agent that is an antagonist specific for a glutamate receptor,
CC
    alkalinizing agent, anticoagulant, tissue plasminogen activator, asprin
CC
CC
    or an anti-platelet agent. The current sequence is that of a deletion
CC
    variant of the P. cambridgei derived psalmotoxin PcTx1 with a 72 amino
CC
    acid C-terminal deletion.
XX
SQ
     Sequence 37 AA;
                         93.1%; Score 229; DB 13; Length 37;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 8.8e-20;
 Matches 37; Conservative 0; Mismatches 0; Indels
                                                                0;
                                                                   Gaps
                                                                            0;
Qу
           1 EDCIPKWKGCVNRHGDCCEGLECWKRRRSFEVCVPKT 37
             1 EDCIPKWKGCVNRHGDCCEGLECWKRRRSFEVCVPKT 37
Db
```

```
RESULT 13
AEG95750
     AEG95750 standard; peptide; 33 AA.
ID
XX
     AEG95750;
АC
XX
DT
     01-JUN-2006 (first entry)
XX
     Psalmotoxin 1 (PcTx1), C-terminal deletion SEQ ID NO:4.
\mathsf{DE}
XX
KW
     Acid sensing ion channel la inhibitor; psalmotoxin 1; PcTx1; ischemia;
     vasotropic; cardiovascular disease; drug screening.
KW
XX
OS
     Psalmopoeus cambridgei.
     Synthetic.
OS
XX
PΝ
     WO2006034035-A2.
XX
PD
     30-MAR-2006.
XX
PF
     16-SEP-2005; 2005WO-US033171.
XX
PR
     16-SEP-2004; 2004US-0611241P.
XX
PΑ
     (VIRO-) VIROGENOMICS INC.
XX
PΙ
     Simon RP, Xiong Z;
XX
DR
     WPI; 2006-254090/26.
XX
PΤ
     Treating ischemia comprises administering a therapeutically effective
PT
     amount of acid sensing ion channel la inhibitor to an ischemic subject to
PΤ
     reduce injury resulting from ischemia.
XX
PS
     Example 2; SEQ ID NO 4; 55pp; English.
XX
CC
     The invention describes the treatment of ischemia which comprises
CC
     administering a therapeutically effective amount of an acid sensing ion
     channel la (ASICla) inhibitor to an ischemic subject to reduce injury
CC
     resulting from ischemia. Also included are: a method of identifying drugs
CC
CC
     for treating ischemia, comprising obtaining ASICla inhibitor(s), and
     testing the ASICla inhibitor(s) for effect on an ischemic subject; a
CC
CC
     composition for treatment of ischemia, comprising an ASICla inhibitor
     disposed in a vehicle at a concentration that provides a therapeutically
CC
CC
     effective amount of the ASIC1a inhibitor for treatment of ischemia when
CC
     administered to an ischemic subject; a method of manufacturing a
CC
     medicament for treatment of ischemia, comprising obtaining an ASIC1a
     inhibitor, and combining the ASICla inhibitor with a vehicle to produce a
CC
CC
     medicament having an inhibitor for administration to an ischemic subject
```

```
for treatment of ischemia; and the use of an ASICla inhibitor for the
CC
    manufacture of a medicament to treat ischemia. The step of administering
CC
     includes a step of administering an ASICla inhibitor that inhibits ASICla
CC
CC
     selectively relative to other ASIC family member(s) and includes a step
CC
     of administering a peptide that includes a cystine knot. It includes a
     step of administering a peptide that is identical to or a derivative of
CC
CC
    PcTx1 (SEQ ID NO:1; see AEG95747). The peptide is a derivative that
CC
    differs from PcTx1 by at least one deletion, substitution, and/or
CC
     addition of amino acid(s). A second inhibitor is administered to the
     subject, and configured to inhibit at least one other channel that is not
CC
     a member of the acid sensing ion channel family. The step of screening
CC
     includes a step of detecting calcium (Ca 2+ ) flux into the cultured
CC
CC
    cells. The step of detecting Ca 2+ flux is performed
CC
     electrophysiologically, with a Ca 2+ sensitive dye, and/or with dye that
     is sensitive to membrane potential. The present sequence represents full-
CC
     length psalmotoxin 1 (PcTx1), C-terminal deletion SEQ ID NO:4.
CC
XX
SQ
     Sequence 33 AA;
 Query Match
                         84.6%; Score 208; DB 11; Length 33;
  Best Local Similarity 100.0%; Pred. No. 2.5e-17;
 Matches
          33; Conservative 0; Mismatches 0; Indels
                                                                0;
                                                                    Gaps
                                                                            0;
           1 EDCIPKWKGCVNRHGDCCEGLECWKRRRSFEVC 33
Qу
              Db
           1 EDCIPKWKGCVNRHGDCCEGLECWKRRRSFEVC 33
RESULT 14
AFH53533
    AFH53533 standard; peptide; 33 AA.
ID
XX
AC
    AFH53533;
XX
    26-JUL-2007 (first entry)
DT
XX
DE
    Tarantula psalmotoxin 1 PcTx peptide SEQ ID NO:9.
XX
KW
    therapeutic; prophylaxis; neuron; nervous system injury; ischemia;
    hypoxia; neuroprotective; vasotropic; psalmotoxin 1; PcTx;
ΚW
    Alzheimers disease; hypertension; epilepsy; brain injury;
ΚW
    cerebrovascular ischemia; nootropic; hypotensive; cerebroprotective;
KW
    anticonvulsant.
KW
XX
OS
    Psalmopoeus cambridgei.
XX
PN
    WO2007030580-A2.
XX
    15-MAR-2007.
PD
```

```
XX
PF
     08-SEP-2006; 2006WO-US034796.
XX
     09-SEP-2005; 2005US-0715881P.
PR
     19-MAY-2006; 2006US-0801830P.
PR
XX
PA
     (UYOR-) UNIV OREGON HEALTH SCI.
XX
PΙ
     Stenzel-Poore M, Stevens S, Simon R;
XX
DR
    WPI; 2007-458051/44.
XX
PΤ
    Protecting a cell in a subject against excitotoxic injury, ischemia or
    hypoxia by administering a composition comprising an agent that activates
PT
    a Toll-like receptor and a composition comprising an acid sensing ion
PT
    channel inhibitor.
PT
XX
PS
    Disclosure; SEQ ID NO 9; 42pp; English.
XX
CC
    The invention describes a method of protecting a cell in a subject
    against excitotoxic injury, ischemia or hypoxia by administering a
CC
CC
    composition comprising an agent that activates a Toll-like receptor,
CC
    preferably a CpG oligonucleotide, and a composition comprising an acid
CC
     sensing ion channel (ASIC) inhibitor, preferably Tarantula psalmotoxin 1
     (PcTx) or a related peptide. The invention also includes use of an ASIC
CC
     inhibitor in preparing a medicament for increasing the protective effect
CC
CC
    of preconditioning treatment with an agent that binds to and activates a
CC
     Toll-like receptor. The ASIC inhibitor is useful in preparing a
CC
    medicament for increasing the protective effect of preconditioning
    treatment with an agent that binds to and activates a Toll-like receptor,
CC
CC
    where the preconditioning treatment protects against injury by an
CC
    excitotoxic event, an ischemic event and/or a hypoxic event. This
CC
     sequence is a Tarantula psalmotoxin 1 PcTx-derived peptide.
XX
SQ
     Sequence 33 AA;
 Query Match
                         84.6%; Score 208; DB 12; Length 33;
 Best Local Similarity
                         100.0%; Pred. No. 2.5e-17;
 Matches
           33; Conservative
                                0; Mismatches 0; Indels
                                                                0;
                                                                    Gaps
                                                                            0;
           1 EDCIPKWKGCVNRHGDCCEGLECWKRRRSFEVC 33
Qу
              Db
           1 EDCIPKWKGCVNRHGDCCEGLECWKRRRSFEVC 33
RESULT 15
ARW11377
ID
    ARW11377 standard; peptide; 33 AA.
XX
```

```
AC
     ARW11377;
XX
     24-JUL-2008 (first entry)
DT
XX
     P. cambridgei psalmotoxin 1 (PcTx1) deletion variant SEQ ID NO:4.
DE
XX
KW
     therapeutic; brain injury; cerebrovascular ischemia; acidosis; vulnerary;
     cerebroprotective; vasotropic; metabolic-gen.; PcTx1; psalmotoxin; toxin.
ΚW
XX
OS
     Psalmopoeus cambridgei.
XX
     WO2008063676-A2.
PN
XX
PD
     29-MAY-2008.
XX
PF
     21-NOV-2007; 2007WO-US024436.
XX
     21-NOV-2006; 2006US-0860522P.
PR
     20-NOV-2007; 2007US-00943546.
PR
XX
PΑ
     (NEUR-) NEUROPROTECT INC.
XX
PΙ
     Simon RP, Xiong Z;
XX
DR
     WPI: 2008-G68865/42.
XX
PΤ
     Preventing or treating brain injury caused by stroke or seizure in
     subject, involves administering inhibitor of acid sensing ion channel and
PΤ
PT
     secondary neuroprotective therapeutic agent.
XX
PS
     Claim 13; SEQ ID NO 4; 120pp; English.
XX
     The invention relates to a method of preventing or treating brain injury
CC
     caused by stroke, seizure or epilepsy in a subject. This is done by
CC
CC
     preventing acidosis by administering an inhibitor of acid sensing ion
CC
     channel and a secondary neuroprotective therapeutic agent. The secondary
CC
     neuroprotective therapeutic agent or any other adjunctive therapeutic
CC
     agent that is an antagonist specific for a glutamate receptor,
CC
     alkalinizing agent, anticoagulant, tissue plasminogen activator, asprin
     or an anti-platelet agent. The current sequence is that of a deletion
CC
     variant of the P. cambridgei derived psalmotoxin PcTx1 with a 74 amino
CC
     acid C-terminal deletion.
CC
XX
SQ
     Sequence 33 AA;
 Query Match
                         84.6%; Score 208; DB 13; Length 33;
 Best Local Similarity 100.0%; Pred. No. 2.5e-17;
 Matches
           33; Conservative 0; Mismatches
                                                   0; Indels
                                                                 0;
                                                                     Gaps
                                                                             0;
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 $SCORE\ Search\ Results\ Details\ for\ Application\ 10571302\ and\ Search\ Result\ 20081124_104456_us-10-571-302-1.rag.$

Qу	1	EDCIPKWKGCVNRHGDCCEGLECWKRRRSFEVC 33	3
Db	1	EDCIPKWKGCVNRHGDCCEGLECWKRRRSFEVC 33	3

Search completed: November 24, 2008, 10:47:45

Job time: 78.037 secs